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Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Express Mail No.: EV124824035US

Attorney Docket No.: 0492611-0534

Date Filed: January 12, 2004

UTILITY PATENT APPLICATION TRANSMITTAL

(for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Dear Sir:

Please find enclosed a patent application and papers as follows for:

Inventor(s):

<u>Given Name (first and middle)</u>	<u>Family Name or Surname</u>	<u>Residence (City and State or Foreign Country)</u>
JOHN	HEYWOOD	NEWTON, MASSACHUSETTS
LESLIE	BROMBERG	SHARON, MASSACHUSETTS
DANIEL	COHN	CHESTNUT HILL, MASSACHUSETTS

**Title of the Invention: High Compression Ratio, High Power Density Homogeneous Charge
Compression Ignition Engines Using Hydrogen and Carbon Monoxide to
Enhance Auto-Ignition Resistance**

A) APPLICATION ELEMENTS:

- 1) ☐ **Fee Transmittal Form** (original and duplicate submitted for fee processing)
- 2) ☒ **Applicant Claims Small Entity Status** (see 37 C.F.R. § 1.27)
 - a) ☐ **Statement Verifying Small Entity Status** (optional)

I hereby certify that this correspondence is being deposited
with the United States Postal Service as first class mail in
an envelope addressed to: Commissioner For Patents,
P.O. Box 1450, Alexandria, VA 22313
on January 12, 2004
Debra R. King

3) ☒ **Specification**

TOTAL PAGES: 15

- ☒ Cover Page
- ☒ Descriptive Title of the Invention
- ☒ Background of the Invention
- ☒ Summary of the Invention
- ☒ Brief Description of the Drawing (if filed)
- ☒ Description of the Preferred Embodiment
- ☒ Claim(s) (3 pgs.)
- ☒ Abstract of the Invention (1 pg.)

4) ☒ **Drawing(s)** (35 U.S.C. § 113)

TOTAL SHEETS: 2

- a) ☐ Formal Drawings (if checked)

5) ☐ **Oath or Declaration**

TOTAL PAGES: _____

- a) ☐ Newly Executed (original or copy)

- b) ☐ Copy from a prior application (37 C.F.R. § 1.63(d))-for
continuation/divisional application

- i) ☐ Deletion of inventor(s): Signed Statement deleting inventor(s) named
in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

- c) ☐ Unexecuted

6) ☐ **Application Data Sheet**. See 37 C.F.R. § 1.76.

7) ☐ **CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)**

8) ☐ **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all are
necessary)

- a) ☐ Computer Readable Form (CRF)

- b) ☐ Specification Sequence Listing on:

- i) ☐ CD-ROM or CD-R (2 copies); or

- ii) ☐ Paper

- c) ☐ Statements verifying identity of above copies

B) ACCOMPANYING APPLICATION PARTS:

- 9) ☐ **Assignment Papers** (cover sheet & document(s))
- 10) ☐ **37 C.F.R. § 3.73(b) Statement** (when there is an assignee)
- 11) ☐ **Power of Attorney**
- 12) ☐ **English Translation Document** (if applicable)
- 13) ☐ **Information Disclosure Statement (IDS)/PTO-1449**
- 14) ☐ **Copies of IDS Citations**
- 15) ☐ **Preliminary Amendment**
- 16) ☒ **Return Receipt Postcard (MPEP 503)** (specifically itemized)
- 17) ☐ **Certified Copy of Priority Document(s)** (if foreign priority is claimed)
- 18) ☐ **Nonpublication Request under 35 U.S.C. § 122(b)(2)(B)(i)**
- 19) ☐ **OTHER:** (if applicable, specified below)

C) FOR CONTINUING APPLICATIONS: (the appropriate box is checked, and certain information is provided below and in a preliminary amendment)

☐ continuation ☐ divisional ☒ continuation-in-part (CIP)

of prior application no.: 10/460,574

filed: June 12, 2003

examiner: Not yet assigned

group/art unit: 3747

for continuation or divisional applications only: The entire disclosure of the prior application, from which an oath or declaration is supplied as detailed above, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

D.) PRIORITY CLAIM(S):

This application claims the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below:

<u>Application Serial No.</u>	<u>Filing date</u>	<u>Status (patented, pending, abandoned)</u>
10/460,574	June 12, 2003	Pending

This application claims the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

<u>Application Serial No.</u>	<u>Filing date</u>	<u>Status (pending, expired, abandoned)</u>
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E) METHOD OF PAYMENT OF FILING FEES FOR THIS APPLICATION:

- ☒ Applicant claims small entity status 37 C.F.R. § 1.27.
- ☒ A check for \$448.00 is enclosed to cover the filing fees.
- ☒ The commissioner is hereby authorized to charge filing fees or to credit any overpayment to deposit account number 03-1721.

Basic Filing Fee (Small Entity)	\$385.00
Additional Fees:	
Total Number of Claims in excess of 20: (27- 20) x \$9	\$63.00
Number of Independent Claims in excess of 3:(2- 3) x \$43	\$0.00
Multiple Dependent Claims \$145:	<u>\$0.00</u>
Total Filing Fee:	\$448.00

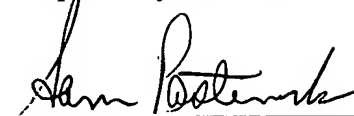
F) CORRESPONDENCE ADDRESS:

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Respectfully Submitted,



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Date: January 12, 2004 Express Mail No.: EV 124824035 US

The Patent and Trademark Office stamping sets forth filing and receipt date (or both the receipt date and the Serial Number) of the Utility Patent Application identified as follows:

Applicant(s): Heywood, et al.

Title: "High Compression Ratio, High Power Density Homogeneous Charge Compression Ignition Engines Using Hydrogen and Carbon Monoxide to Enhance Auto-Ignition Resistance"

Comprising: 12 pages of Specification (including 1 Cover Page; 7 pgs. of Description; 3 pgs. of Claims, 1 pg. of Abstract); and 2 pages of Drawings.

Also enclosed:

- 1) U.S. Utility Patent Application Transmittal (5 pgs.);
- 2) Check in the amount of \$448.00; and
- 3) Return-receipt postcard.

Attorney: SP Attorney Docket No. 0492611-0534